

Patent Claims

What is claimed is:

- 5 1. A polyamide molding compound having a partially crystalline polyamide, which includes partially aromatic copolyamides and classic mineral fillers, characterized in that the mineral filler is ultrafine chalk (CaCO_3) and has an average particle size of at most 100 nm.
- 10 2. The polyamide molding compound according to Claim 1, characterized in that it includes at most 40 weight-percent ultrafine chalk.
- 15 3. The polyamide molding compound according to Claim 1 or 2, characterized in that the ultrafine chalk has an average particle size of at most 90 nm, preferably an average particle size of at most 80 nm, and especially preferably an average particle size of 70 nm.
- 20 4. The polyamide molding compound according to one of the preceding claims, characterized in that the partially aromatic copolyamides are based on the monomers hexamethylene diamine and aromatic dicarboxylic acids.
- 25 5. The polyamide molding compound according to Claim 4, characterized in that the aromatic dicarboxylic acids include terephthalic acid and isophthalic acid in the ratio 70/30.
- 30 6. A blank made of an injection-molded polyamide molding compound according to one more of Claims 1 to 5, characterized in that it includes a smooth surface having a high gloss, produced by a molding tool polished to a high gloss.

7. A reflector for vehicle driving illuminators, turn signals, or street lamps, and/or a sub-reflector for vehicle driving illuminators characterized in that it includes a blank according to Claim 6 and is metalized directly.
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8. The reflector and/or sub-reflector according to Claim 7, characterized in that the metal coating is applied through PVD methods and the iridescence temperature is at a value which is higher than 220 °C.
- 10 9. A method of producing a polyamide molding compound having a partially crystalline polyamide, which includes partially aromatic copolyamides and classic mineral fillers, characterized in that the mineral filler is ultrafine chalk (CaCO_3), has an average particle size of at most 100 nm, and is admixed to the polyamide using a double-screw extruder.
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10. The method according to Claim 9, characterized in that the polyamide and at most 40 weight-percent ultrafine chalk are each separately dosed into the intake of the double-screw extruder.
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11. A use of a polyamide molding compound according to one of Claims 1 to 5 for injection molding reflectors and/or sub-reflectors for vehicle driving illuminators or reflectors of turn signals or street lights.
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12. The use of a polyamide molding compound according to Claim 11, characterized in that the gas injection molding technique is used during injection molding.